

REMARKS

In the Office Action dated August 2, 2004, claims 1-4, 6-17, and 19-28 were rejected under 35 U.S.C. § 102 over U.S. Patent No. 6,539,015 (Voit)¹; and claims 5 and 18 were rejected under § 103 over Voit in view of U.S. Patent No. 6,182,136 (Ramanathan).

It is respectfully submitted that independent claim 1 is not anticipated by Voit. Claim 1 recites a method that includes retrieving a set of IP routes linking server IP addresses (assigned to a single domain name) and a client IP address (received in a request for the domain name), and selecting an *IP route* from the set of routes which meets predetermined criteria.

The meaning of “IP route” refers to a route between at least two IP addresses. Thus, the reference in claim 1 to retrieving a set of IP routes means retrieving information including at least two IP addresses for each IP route in the set. In the context of claim 1, the retrieved IP routes each includes a respective one of the server-IP addresses and the client IP address.

In contrast, in Voit, the DNS server uses either a translation table or a routing control record (RCR) to retrieve a destination IP address. Voit, 13:6-14:27. Voit contemplates one of two techniques for obtaining the destination IP address in response to a query received by the DNS server. The first technique involves accessing the translation table based on a domain name to translate the domain name into an IP address. Voit, 13:31-48. This first technique involves a one-to-one translation between domain name and IP address. Thus, this first technique cannot satisfy the acts of claim 1 that include retrieving a set of IP routes (note plural sense), and selecting an IP route from the set of IP routes.

A second technique described by Voit involves customers who have subscribed to conditional analysis type of processing. Voit, 13:49-51. For such customers, the translation table maps a domain name to a pointer to a routing control record (RCR) 81 (instead of mapping a domain name to an IP address as performed with the first technique). Voit, 13:51-56. The RCR specifies a set of conditions or criteria and two or more alternate destinations, depending on which criteria are satisfied by a current call or translation request query. Voit, 14:1-4. The example provided by Voit is that the RCR may specify alternate

¹ The introductory sentence in paragraph 2 of the Office Action indicated that claims 1-28 were rejected under § 102 over Voit. However, the explanatory text following the introductory paragraph 2 of the Office Action does not provide any explanation regarding how claims 5 and 18 are taught by Voit. It is believed that the reference to all of claims 1-28 as being rejected under § 102 over Voit is a typographical error.

destination addresses for different times or for different addresses of the terminal that requested the translation. Voit, 14:4-7. However, although the second technique refers to mapping a domain name to two or more alternate destination IP addresses, there is no indication of “retrieving a set of *IP routes* linking the server IP addresses and client IP address” as recited in claim 1. Retrieving destination IP addresses is not the same as retrieving a set of IP routes, as recited in claim 1.

In view of the foregoing, it is respectfully submitted that claim 1 is not anticipated by Voit.

Dependent claims are allowable for at least the same reasons. Moreover, with respect to claim 3, there is no teaching by Voit that retrieving the set of IP routes is from an IP routes database. What is taught by Voit is either a translation table (that performs one-to-one mapping between a domain name and a destination IP address) or the RCR (that performs mapping between a domain name and two or more alternate destination IP addresses). Neither the translation tables nor the RCR of Voit can constitute an IP routes database that contains a set of IP routes.

Claim 4, which also depends from claim 1, further recites that retrieving the set of IP routes is from a set of routers using a BGP protocol. The Office Action stated that using a BGP protocol is an inherent feature of a gateway function described in column 10, lines 21-33, and column 11, lines 7-17, of Voit. 8/2/2004 Office Action at 3. It is respectfully submitted that the Office Action has failed to establish that the BGP protocol is an inherent feature of the gateway or firewall described in Voit.

To establish inherency, the extrinsic evidence ‘must make clear that the missing descriptive matter is necessarily present in the thing described in the reference, that it would be so recognized by persons of ordinary skill. Inherency, however, may not be established by probabilities or possibilities. The mere fact that a certain thing may result from a given set of circumstances is not sufficient.’

M.P.E.P. § 2112 (8th ed., Rev. 2), at 2100-54 to 2100-55 (citing *In Re Robertson*, 169 F.3d 743, 745, 49 U.S.P.Q.2d 1949, 1950-51 (Fed. Cir. 1999)). In relying upon the theory of inherency, the rules require that the examiner must provide a basis in fact and/or technical reasoning to reasonably support the determination that the allegedly inherent characteristic *necessarily* flows from the teachings of the applied prior art. M.P.E.P. § 2112, at 2100-55.

It is noted that the disclosure of the present invention teaches that there are various techniques for communications between a DNS server and routers, including a BGP protocol, an SNMP protocol, and a Telnet protocol. This would indicate that the presence of a gateway as taught by Voit does not *necessarily* require that the BGP protocol be used. Therefore, the Office Action has failed to establish a proper anticipation rejection against claim 4.

Similarly, with respect to claim 6, the Office Action has failed to establish that a Telnet protocol is an inherent feature of routers. The disclosure of the present invention teaches that one of several different types of protocols can be used to establish sessions with routers – that would contradict the assertion made in the Office Action that the Telnet protocol is necessarily implemented in routers.

The Office Action has also failed to establish that the additional features of claims 7-10 are inherent features of the system described by Voit. Claim 7, which depends from claim 1, recites selecting an IP route from the set of IP routes that has a shortest AS path. Except for a conclusory statement that selection of a route from multiple IP routes that has a shortest AS path is inherently part of routers, no supporting rationale is provided regarding why such a selection would be necessarily part of the routers. Moreover, there is an internal inconsistency between the rejection of claim 7 and independent claim 1. The rejection of independent claim 1 refers to acts performed by a DNS server; however, the rejection of claim 7 points to selection of an IP route from a set of IP routes as being inherently part of *routers*. The rejection does not explain how the DNS server would use an inherent feature of routers, which are different from the DNS server, to select an IP route from a set of IP routes using the shortest AS path.

With respect to claim 8, which depends from claim 1, the Office Action stated that selecting the IP route that has a lowest origin type is an inherent feature of a DNS server. No supporting technical rationale was provided regarding why such a selection would be inherently part of the DNS server of Voit.

With respect to claim 9, the Office Action has failed to establish that selecting an IP route from the set of IP routes that has a lowest MED is an inherent feature of the DNS server of Voit. No supporting technical rationale was provided regarding why such selection would be inherently part of the DNS server of Voit.

Claim 12, which depends from claim 1, recites storing the IP routes in an IP routes database. Claim 12 is allowable for reasons similar to those as claim 3.

With respect to claim 13, which depends from claim 1, the Office Action cited column 12, lines 49-64, of Voit as disclosing the recited enhanced address resource record, which includes a domain name, a list of corresponding servers and routers, router retrieval parameters, a default client/server route, and timeouts. The cited passage of Voit refers to translation tables 77 and RCRs 81. There is no teaching whatsoever by Voit that the translation tables 77 or RCRs 81 contain any of the following information: router retrieval parameters, a *default* client/server route, timeouts.

Independent claim 15 is allowable over Voit for reasons similar to those as claim 1.

Claims dependent from claim 15 are allowable for the same reasons. Moreover, claims 17, 19, 20, 21, and 22 are allowable for reasons similar to those given for respective dependents claims 4, 6, 7, 8, and 9.

Independent claim 25 is allowable over Voit, which fails to disclose a DNS server for downloading IP routes from the routers for storage in an IP routes database, and in response to a query containing a domain name received from a client computer, selecting one of the IP routes contained in the IP routes database which meets predetermined criteria.

Claims dependent from claim 25 are allowable for at least the same reasons. Moreover, with respect to claim 28, there is no teaching by Voit of an enhanced address resource record that stores a set of router retrieval parameters, a default IP route, and timeouts.

Dependent claims 5 and 18 were rejected as being obvious over Voit and Ramanathan. Because the obviousness rejection is based on an incorrect application of Voit to the respective base claims, the obviousness rejections of claims 5 and 18 over Ramanathan is also defective.

Newly added dependent claims 29-52 are allowable for at least the same reasons as corresponding independent claims.

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In view of the foregoing, it is respectfully submitted that all claims are in condition for allowance, which action is respectfully requested. The Commissioner is authorized to charge any additional fees and/or credit any overpayment to Deposit Account No. 08-2025 (10006946 1).

Respectfully submitted,

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